CLAIMS:

1. A helicopter having a coaxial rotor set, comprising;

a first rotor carried by a first shaft;

a second rotor carried by a second shaft;

wherein the first rotor is configured for cyclic pitch control, and the second rotor does not have cyclic pitch control, whereby pitch and roll control of the helicopter by means of the coaxial helicopter rotor set is effected by cyclic pitch control of the first rotor.

2. A helicopter as set forth in claim 1, further comprising an airfoil disposed in a downwash from the rotor set configured to be actuatable to deflect downwash so as to provide a yaw control in combination with pitch and roll control provided by said cyclic pitch control of the first rotor.

3. A helicopter as set forth in claim 2 wherein the rotor set does not have a collective pitch control and the airfoil comprises a primary means of yaw control.

4. A helicopter as set forth in claim 1 where the first and second rotors each further comprise a collective blade pitch control system.

5. A helicopter as set forth in claim 4, wherein the collective blade pitch control system enables a collective pitch of the first rotor to be varied with respect to the collective pitch of the second rotor

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so as to provide a differential collective pitch control enabling yaw control by means of varying the collective blade pitch of the rotors with respect each other.

6. A helicopter as set forth in claim 1, wherein the first rotor comprises the lower rotor of the coaxial rotor set.

7. A helicopter as set forth in claim 1, wherein the first rotor comprises the upper rotor of the coaxial rotor set.

8. A coaxial helicopter having a coaxial rotor set including a lower rotor carried by an outer drive shaft and an upper rotor carried by an inner drive shaft, comprising:

a cyclic blade pitch control linkage operatively coupled to only one of the upper rotor and the lower rotor;

control of pitch and roll of the helicopter being effected by said cyclic blade pitch control linkage through only one of the upper rotor and the lower rotor.

9. A coaxial helicopter as set forth in claim 8, further comprising collective blade pitch control linkages operatively coupled to the upper and lower rotors;

10. A coaxial helicopter as set forth in claim 8, wherein the cyclic blade pitch control linkages are operatively coupled to the lower rotor.

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11. A coaxial helicopter as set forth in claim 8, wherein the cyclic blade pitch control linkages are operatively coupled to the upper rotor.

12. A coaxial helicopter as set forth in claim 11, wherein a blade pitch control linkage operatively coupled to the upper rotor is disposed within the inner driveshaft.

13. A coaxial helicopter as set forth in claim 9, wherein yaw control is by differential movement of the collective blade pitch control linkages operatively coupled to the upper and lower rotors to provide differential collective blade pitch.

14. A coaxial helicopter, comprising:

an airframe;

a power assembly operatively connected to an inner driveshaft and an outer driveshaft;

an upper rotor carried by the inner driveshaft;

a lower rotor carried by the outer driveshaft;

a control system, further comprising:

a cyclic blade pitch control linkage operatively coupled to only one of the upper and lower rotors;

control of at least pitch and roll of the helicopter being effected by said cyclic blade pitch control linkages.

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15. A helicopter as set forth in claim 14, further comprising yaw paddles carried by the airframe impinging upon a downwash from the coaxial rotor set, said yaw paddles being controllably tiltable to redirect downwash air so as to induce and control yaw motion of the airframe.

16. A helicopter as set forth in claim 14, wherein the cyclic blade pitch control linkage is operatively coupled to the lower rotor.

17. A helicopter as set forth in claim 14, wherein the cyclic blade pitch control linkage is operatively coupled to the upper rotor.

18. A helicopter as set forth in claim 14, wherein a blade pitch control linkage operatively coupled to the upper rotor is disposed within the inner driveshaft.

19. A helicopter as set forth in claim 14, further comprising collective blade pitch control linkages operatively coupled to the upper and lower rotors.

20. A helicopter as set forth in claim 19, wherein yaw control is by differential collective control of upper and lower rotors.

21. A coaxial helicopter having a first rotor and a second rotor counter-rotating with respect to the first, wherein provisions for control of the aircraft comprise:

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a cyclic control for one rotor of said first and second rotors only, and no cyclic control for the other rotor of said first and second rotors;

a yaw control;

wherein pitch and roll control are provided by the cyclic control of said one rotor only.

22. A system in accordance with claim 21 wherein yaw control is provided by at least one of: differential collective control of the first and second rotors; yaw paddles; a tail rotor; a ducted air jet.

23. A system in accordance with claim 21, further comprising a collective control of both the first and second rotors.

24. A system in accordance with claim 21, further comprising a collective control of only one of the first and second rotors, and wherein the yaw control cooperates with the collective control to provide yaw control.

25. A system in accordance with claim 21, wherein cyclic blade pitch control is provided to the top rotor of the first and second rotors.

26. A system in accordance with claim 25, wherein collective is provided to both the first and second rotors.

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